Questions for 120 Exam:

Name the two theoretical machines that Charles Babbage developed.

Give the code to declare an integer variable called x and then assign it the number 10.

Give the code to print out "Hello World".

Name three primitive types.

What is the difference between float and double?

What is the difference between operand and operator?

Give an example of a binary operator and a unary operator.

Who was Augusta Ada Byron, the Lady Lovelace, and why was she important?

Give a detailed algorithm for getting a glass of water.

What is an algorithm?

Declare a named double constant called PI that has the value 3.1459.

What are these three symbols: <=, &&, ||

Give the truth table for two variables x and y for logical AND.

Write the code to find the remainder r when dividing numbers x and y.

Declare a String variable and give it the value of your name.

What does this code snippet output:

```
int a = 5;
int b = 3;
int c = a / b;

System.out.println(c);
```

What is a program?

What does this code snippet output:
```
int x = 7;
int y = 9;
int z = 3;
int a = x-y*z;
System.out.println(a);
```

Give a detailed algorithm for making a peanut butter and jelly sandwich.

Declare a constant named MOLE with the value 6.022×10^{23}.

Complete this program:
```
import java.util.*;

//This program will find the average of two numbers and print out the result
public class MyProgram {
        public static void main(String args[]) {
        }
}
```

What are two ways to add 1 to a value?

What do == and != mean?

Why do we use constants?

Give the truth table for a variable x and the logical operator NOT.

What is wrong with this code:

```
public class MyProgram {
        public static void main(String args[]) {
                private static final double PI = 3.14159;
                double c = 2 * PI * r
                System.out.println("c = " c);
        }

}
```

What are the behaviors, attributes and questions for a class that represents a chair?